

Amy Jo Dowd, Senior Director, Education Research Lauren Pisani, Senior Specialist, Education Research



Hypotheses about Cross Linguistic Transfer

- Contrastive hypothesis: the degree of similarity/divergence between L1 and L2 mediates transfer of skills (Lado, 1964)
- Interdependence hypothesis: skills learned in both languages mutually feed each other (Cummins, 1979)
 - Threshhold hypothesis: a child must reach a certain degree of proficiency in one language before transferring those skills to the other.





Samples

country	grade	LI: first language	L2: second language	N students	N schools	LI % readers
Bangladesh	3	Bangla	English	639	34	75%
Guatemala	3	K'iche'	Spanish	274	14	46%
Pakistan	2	Pashto	Urdu	243	15	20%
Philippines	3	Filipino	English	283	1:14 sections	29%
Malawi	3	Chichewa	English	600	30	79%
South Africa	2	Sesotho	English	240	14	81%
Zambia	3	Bemba	English	383	24	1%
Zimbabwe	3	Shona	English	200	10	53%

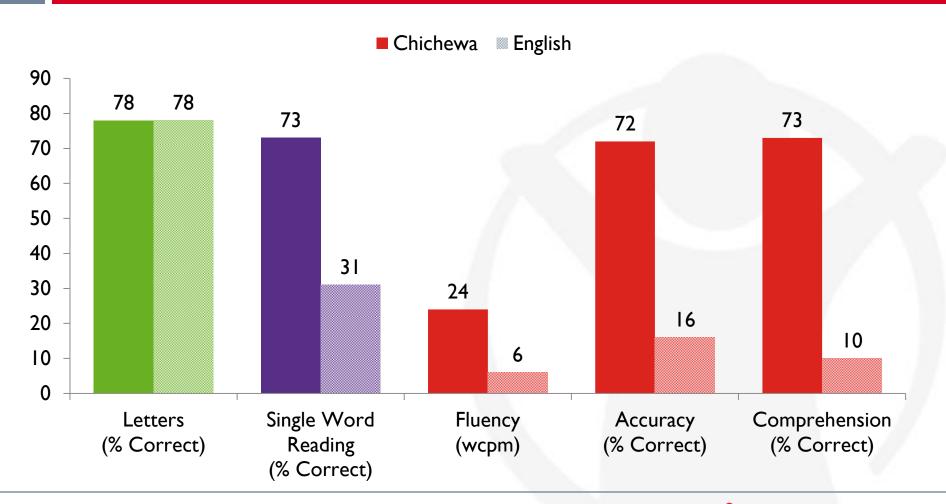


Reading skills data

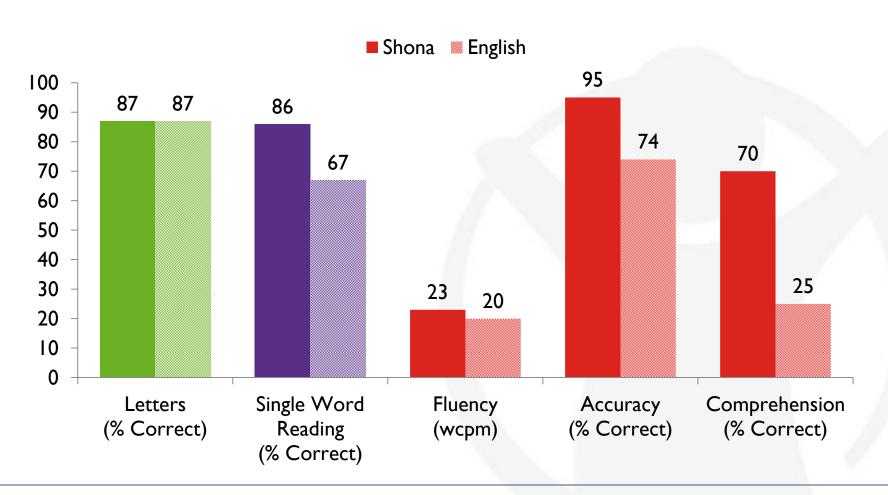
Reading Skill	Description				
Alphabet knowledge	Percent of letters/sounds known				
Single Word Reading	Percent of single words read correctly of 20				
Fluency	Number of words in a grade-level connected text read aloud correctly in a minute				
Accuracy	Percentage of words in a grade-level connected text read correctly (untimed)				
Reading Comprehension	Number of comprehension questions answered correctly after reading a grade-level text aloud				



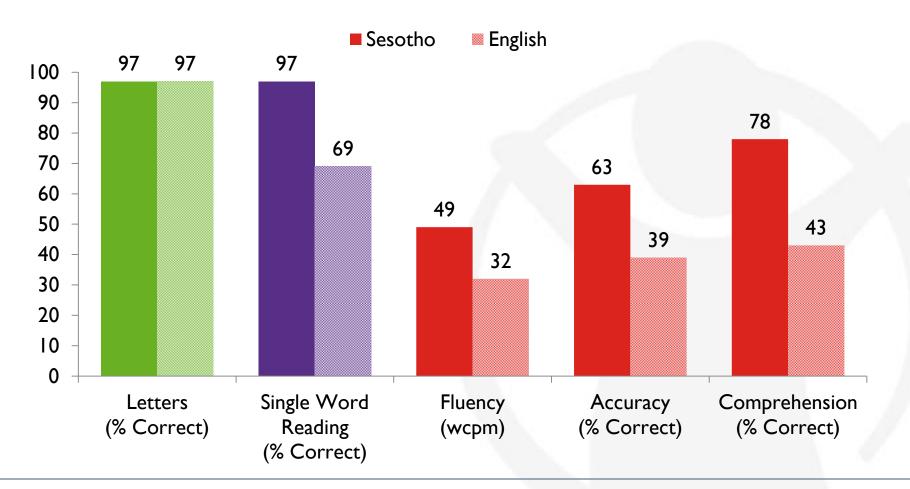
Malawi: L1 and L2 skill profile



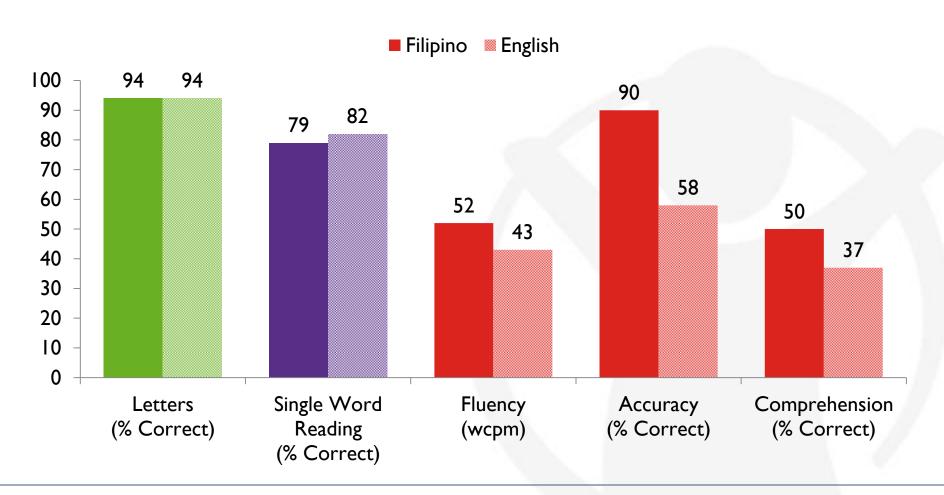
Zimbabwe: LI and L2 skill profiles



South Africa: L1 and L2 skills profiles

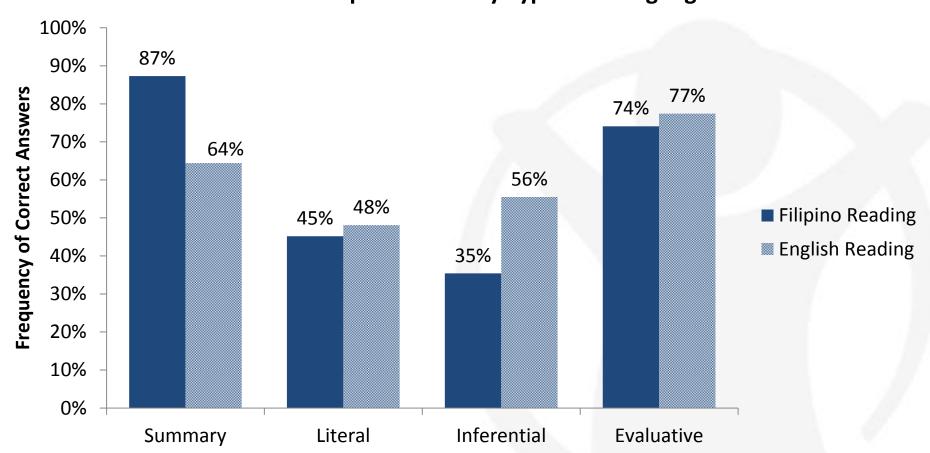


Philippines: L1 and L2 skill profile

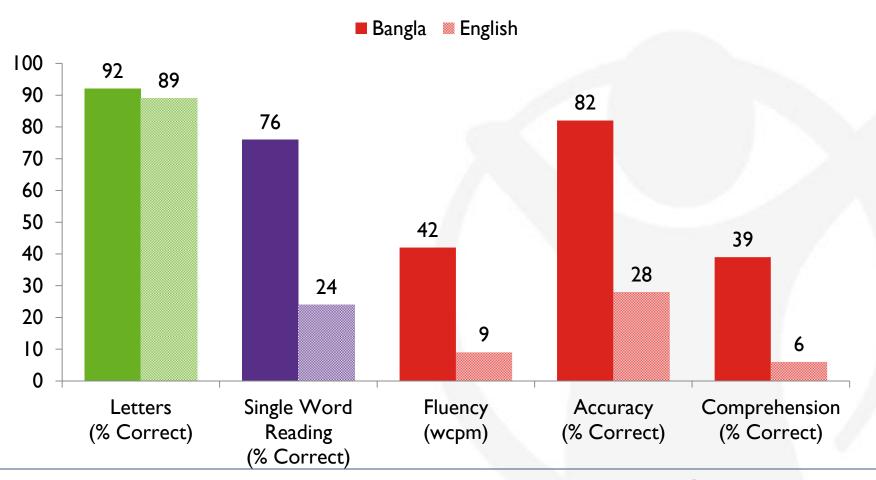


Philippines: Reading Comprehension

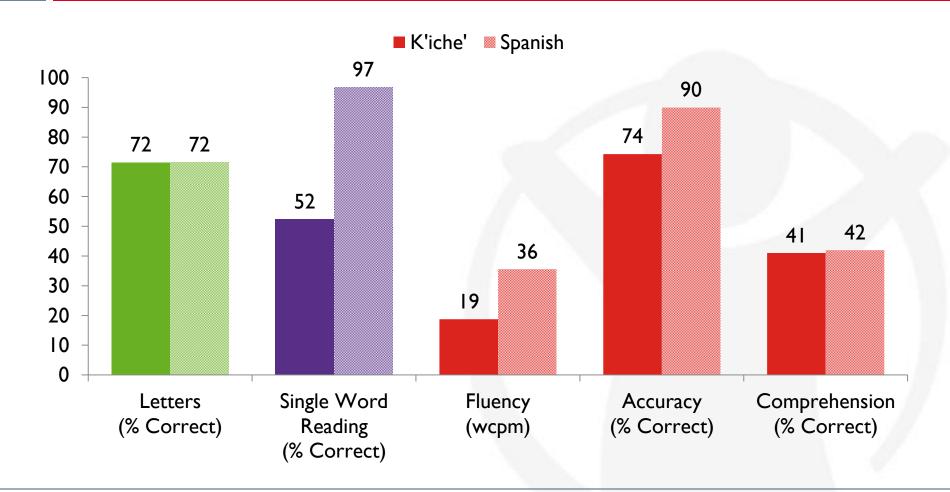




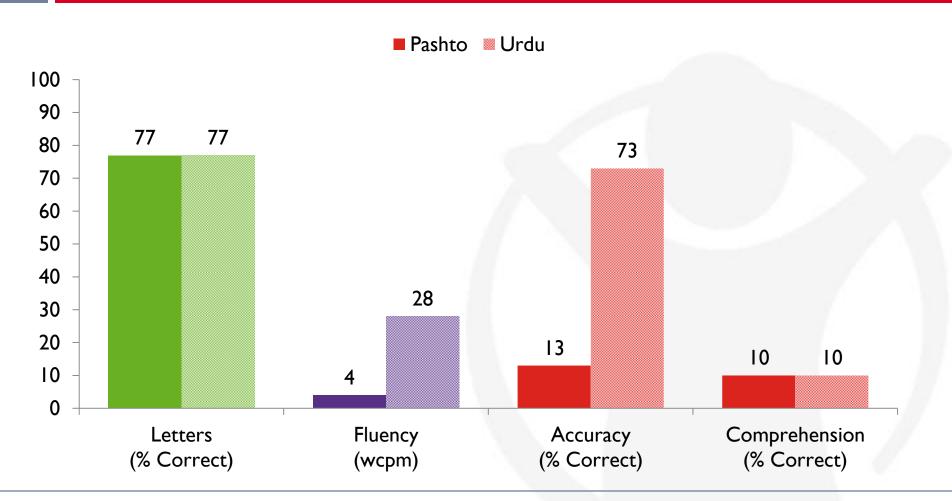
Bangladesh: L1 and L2 skill profile



Guatemala: L1 and L2 skill profile



Pakistan: LI and L2 skill profile



Does the evidence fit the expected pattern?

Skills Profile shows

LI -> L2 pattern

- Malawi
- South Africa
- Zimbabwe
- Bangladesh

Skills Profile doesn't show

LI -> L2 pattern

- Philippines
- Guatemala
- Pakistan

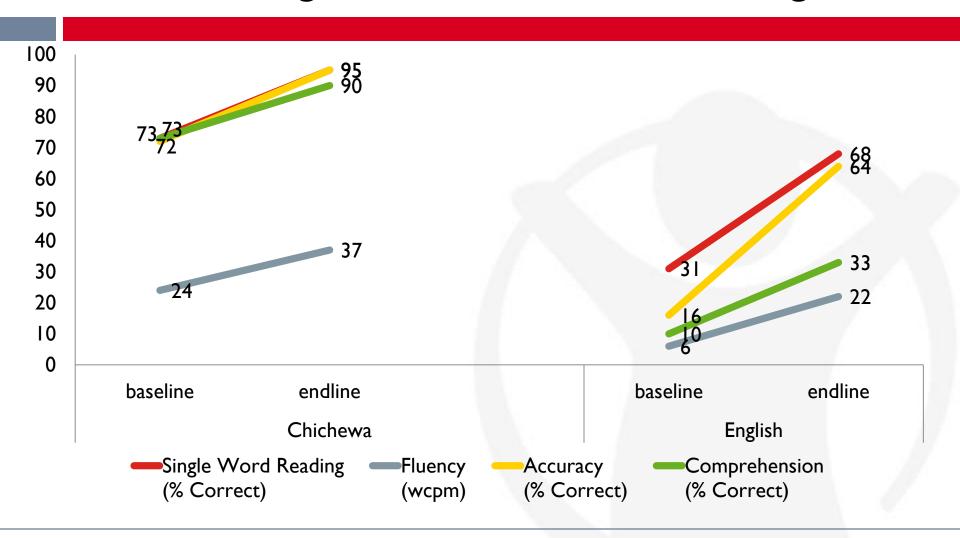


Research Questions at Time 2

- Across a year, is growth similar L1 and L2?
- Language interdependence literature suggests that reading skills in L1 link to the same or higher order skills in L2: does L1 status predict L2 growth?

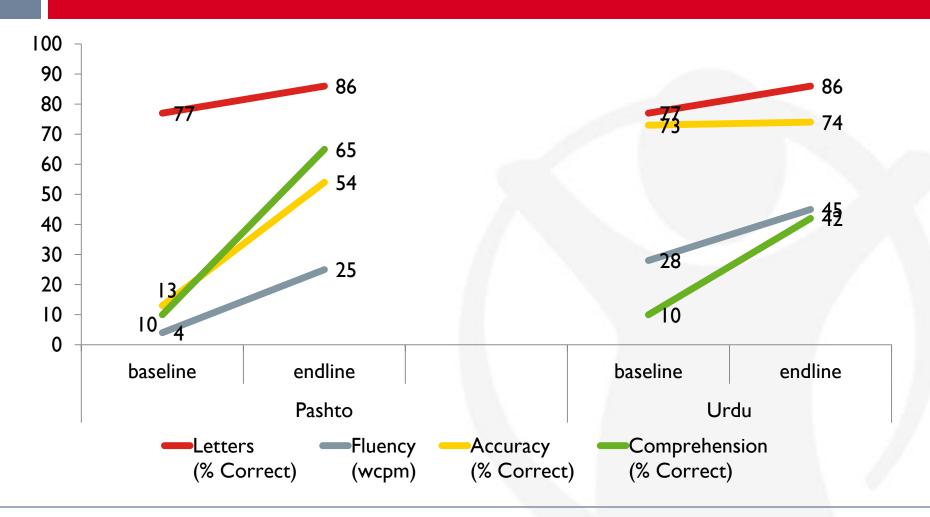


Malawi: skills growth in Chichewa and English



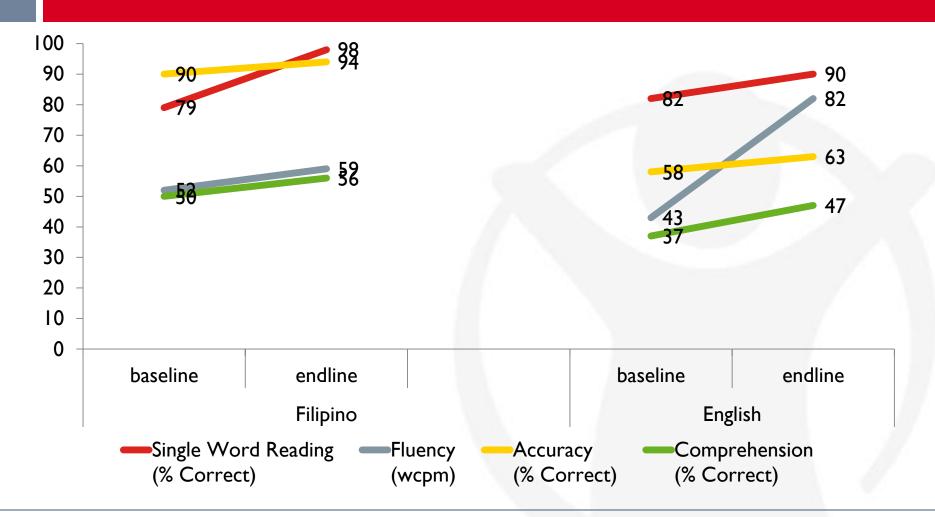


Pakistan: skills growth in Pashto and Urdu

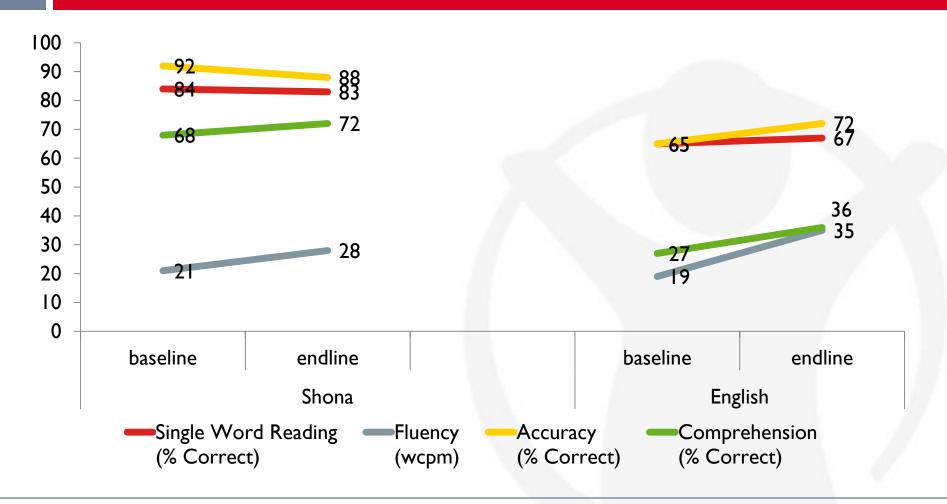




Philippines: skills growth in Filipino and English

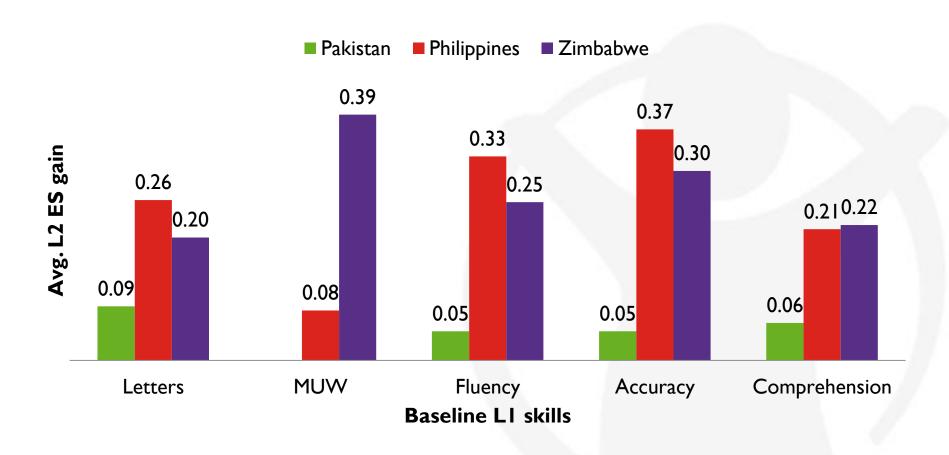


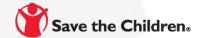
Zimbabwe: skills growth in Shona and English





LI baseline skills predict higher order L2 skill gains





Conclusions and questions

- It is not clear which hypothesis is any more or less strongly borne out in these skill profiles and pictures of growth.
- Context seems capable of messing with the assumed primacy of L1 in the directionality of L1->L2 transfer.
- How much transfer is expected or good?
- How would you design a study to test language learning interdependence?





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THANK YOU!

ADOWD@SAVECHILDREN.ORG